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APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,799	12/07/2001		Yoshiaki Usami	N9450.0037 /P037	7617
24998	7590	02/16/2006		EXAMINER	
2.01101.01		IRO MORIN & OS	DESHPANDE, KALYAN K		
2101 L Street, NW Washington, DC 20037			ART UNIT	PAPER NUMBER	
				3623	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
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	Office Action Commence	10/004,799	USAMI ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Kalyan K. Deshpande	3623					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1)⊠	Responsive to communication(s) filed on <u>07 De</u>	ecember 2001.						
<i>,</i> —	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3) 🗌	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims							
4)⊠ Claim(s) <u>1-13</u> is/are pending in the application.								
• —	4a) Of the above claim(s) <u>8-10</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.								
6)🖂	6)⊠ Claim(s) <u>1-7 and 11-13</u> is/are rejected.							
•	Claim(s) is/are objected to.							
8)□	Claim(s) are subject to restriction and/or	r election requirement.						
Applicati	ion Papers							
9)[	The specification is objected to by the Examine	r.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority (	under 35 U.S.C. § 119	•						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☑ Some * c) ☐ None of:  1.☑ Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).								
* See the attached detailed Office action for a list of the certified copies not received.								
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Attachmen		=						
1) Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Apper No(s)/Mail Date								
3) 🛛 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 12/7/2001.		Patent Application (PTO-152)					

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#### **DETAILED ACTION**

#### Introduction

1. The following is a non-final office action in response to the communications received on December 7, 2001. Claims 1-13 are now pending in this application.

Claims 8-10 have been withdrawn from further consideration as they have been cancelled per Applicant's request. Claims 1-7 and 11-13 are rejected.

#### Information Disclosure Statement

2. The examiner has reviewed the patents and articles supplied in the Information Disclosure Statements (IDS) provided on December 7, 2001.

### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 5, 6, and 7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites "a building group management service support *system*". Claim 5 is dependant on either claim 3 or 4. Claims 3 and 4 recite "a building group management service support *device*". It is not clear how claim 5 claiming a system draws on claim 3 or claim 4 which are devices.

Claim 6 is rejected because it is dependant on claim 5.

Claim 7 begins with the term "aid" and it is unclear as to what the meaning is or if elements of this claim are missing. For the purposes of examination, Examiner is

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interpreting the beginning of claim 7 to read "The system of claim 3, or 4, or 5, or 6, wherein said...".

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labedz et al. (U.S. Patent No. 6993576) in further view of Watson (U.S. Patent No. 6581045).

As per claim 1, Labedz teaches:

A building group management service support method for managing facilities composed of a plurality of maintenance subjects using a computer system by a facility manager entrusted with operations of a plurality of maintenance companies for executing maintenance for each of said maintenance subjects for said facilities from a facility owner having said facilities, and said computer system is connected to a facility owner terminal and a facility manager terminal via a network (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, and figures 2-7; where a maintenance system for managing facilities is provided. The system includes a client (facility manager) entrusted with creating and scheduling maintenance tasks for those living at the facility. The client machines, servers, and database are all connected via the Internet.), and

said facility manager terminal extracts maintenance service characteristics of each of said maintenance companies, decides combinations of maintenance companies having same said service characteristics of all said maintenance subjects as maintenance plans, decides evaluation for operations of said facilities as facility operation evaluation on the basis of maintenance information including a fault time or fault contents output from said facilities, and indicates said plurality of maintenance plans and said facility operation evaluation on said facility owner terminal (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, column 10 lines 35-59, and figures 2-7 and 10; where the client has access to the maintenance clearinghouse. The system also provides for inspection scheduling of facilities in order to determine whether maintenance is needed.), and

said facility manager terminal selects a maintenance plan entrusted with management from said plurality of maintenance plans and notifies said facility manager terminal of said maintenance plan (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, column 10 lines 35-59, and figures 2-7 and 10; where the client (facility manager) selects and schedules appropriate maintenance for the facilities. Since the client (facility manager) selects the maintenance operations, he is already notified.).

Labedz fails to teach:

Facility owner terminal selects a maintenance plan

Watson teaches:

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Facility owner selects a maintenance plan (see column 25 lines 19-41).

The advantage to having the facility owner select a maintenance plan, as opposed to the facility manager, is that the selected maintenance plan has the entrusted support from ownership furthering the precision and organization of the system. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to combine the feature of a facility owner selecting a maintenance place taught by Watson to the facility maintenance management system taught by Labedz in order to entrust support from ownership furthering the precision and organization of the system, which is a goal of Labedz (see column 1 lines 35-40).

As per claim 2, Labedz teaches:

A building group management service support method according to claim 1, wherein said computer system includes a facility user terminal connected via said network and said facility manager terminal requests a user questionnaire for and decides an analytical result of said user questionnaire as user evaluation, and when said maintenance plan and said facility operation evaluation are to be indicated on said facility owner terminal, indicates said user evaluation (see column 10 lines 35-59 and figures 10 and 13; where the user pre-defines an inspection template. The user uses the template to determine satisfactory completion of tasks. The template consists of a list of tasks to be completed for the job. The template is the same as a questionnaire, especially since it holds specific questions for users to evaluate.).

Labedz fails to teach:

entering a degree of use satisfaction to a facility user using said facilities

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The advantage of enabling users to enter a degree of satisfaction is that it enables the system to accurately capture customer satisfaction. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to enable the user to enter a degree of satisfaction to the Labedz checklist in order to prompt user satisfaction, which is a goal of Labedz (see column 1 line 25-29).

As per claim 3, Labedz teaches:

A building group management service support device for buildings for managing facilities composed of a plurality of maintenance subjects using a computer system by a facility manager by trust with operations of a plurality of maintenance companies for executing maintenance for each of said maintenance subjects for said facilities from a facility owner having said facilities, wherein said computer system is connected to a facility owner terminal and a facility manager terminal via a network (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, and figures 2-7; where a maintenance system for managing facilities is provided. The system includes a client (facility manager) entrusted with creating and scheduling maintenance tasks for those living at the facility. The client machines, servers, and database are all connected via the Internet.), and

said facility manager terminal has a maintenance service combination display unit for displaying, from a result of extraction of maintenance service characteristics of each of said maintenance companies, a result of decision as a combination of maintenance companies having same said service characteristics of all said maintenance subjects and a facility operation evaluation display unit for displaying

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evaluation decided for said facility operation on the basis of maintenance information including a fault time or fault contents output from said facilities (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, column 10 lines 35-59, and figures 2-7 and 10; where the client has access to the maintenance clearinghouse. The system also provides for inspection scheduling of facilities in order to determine whether maintenance is needed.), and

said facility manager terminal selects a maintenance plan entrusted with management from said plurality of maintenance plans and notifies said facility manager terminal of said maintenance plan (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, column 10 lines 35-59, and figures 2-7 and 10; where the client (facility manager) selects and schedules appropriate maintenance for the facilities. Since the client (facility manager) selects the maintenance operations, he is already notified.).

Labedz fails to teach:

Facility owner terminal selects a maintenance plan

Watson teaches:

Facility owner selects a maintenance plan (see column 25 lines 19-41).

Claim 3 recites limitations already addressed by the rejection of claim 1; therefore the same rejection applies to this claim.

As per claim 4, Labedz teaches:

A building group management service support device according to claim 3, wherein said facility owner terminal has a user evaluation display unit for requesting

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a user questionnaire and deciding an analytical result of said user questionnaire as user evaluation, and displaying said user evaluation (see column 10 lines 35-59 and figures 10 and 13; where the user pre-defines an inspection template. The user uses the template to determine satisfactory completion of tasks. The template consists of a list of tasks to be completed for the job. The template is the same as a questionnaire, especially since it holds specific questions for users to evaluate. The system displays the current checklist, saved checklists, and enables the user to modify the checklists.).

Labedz fails to teach:

entering a degree of use satisfaction to a facility user using said facilities

Claim 4 recites limitations already addressed by the rejection of claim 2;
therefore the same rejection applies to this claim.

As per claim 5, Labedz teaches:

A building group management service support system, wherein input/output data in said maintenance service combination display unit, or said facility operation evaluation display unit, or said user evaluation display unit, or said maintenance plan selection unit which are described in claim 3 or 4 is registered in a server connected to said network (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, and figures 2-7; where all client terminals, servers, and clearing warehouse are connected a network and the Internet) and

said facility manager terminal, or said facility owner terminal, or said maintenance company terminal, or said facility user terminal refers to said input/output data via

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said network (see column 2 lines 4-18, column 3 lines 37-59, column 4 lines 38-50, column 5 lines 40-55, and figures 2-7; where all client terminals, servers, and clearing warehouse are connected a network and the Internet).

As per claim 6, Labedz teaches:

A computer program storage medium which is a program storage medium for storing a computer program capable of being read by a computer stores a program code of said device or said system described in claim 3, or 4, or 5 (see column 4 lines 65-67, column 5 lines 1-40 and figure 2; where the computer program can be stored on any client machines or servers and data is stored in the database.).

As per claim 7, Labedz fails to teach:

facility operation evaluation or said user evaluation is executed by a terminal of an evaluation company which is a third person independently of said facility manager or said maintenance companies.

It is old and well-known in the art to have 3<sup>rd</sup> parties review user evaluations. The advantage of allowing a 3<sup>rd</sup> party to review user evaluations is that the third party can neutrally view the evaluations to render an accurate analysis of customer satisfaction. It would have been obvious, at the time of the invention, for one of ordinary skill in the art to enable a 3<sup>rd</sup> party to review user evaluations in order to render a more accurate analysis of user satisfaction, which is a goal of Labedz (see column 1 line 25-29).

7. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watson (U.S. Patent No. 6581045).

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As per claim 11, Watson teaches:

A building group management service support method for planning repair work of a plurality of buildings for which a repair time and a repair cost of next repairs of said buildings, a life of repairs indicating a time up to successive repairs, and a building estimated value indicating an economical value of said buildings are estimated using a computer, wherein: said computer calculates a variation of said repair cost when said repair time is to be changed within a predetermined time on the basis of said life of repairs and said building estimated value and changes said repair time so as to minimize a total of said repair cost of said plurality of buildings and said variation (see column 7 lines 45-59, column 9 lines 5-24, column 9 line 42-60, and column 25 lines 19-41; where inspections are done to determine the condition of assets. The condition of the assets are evaluated in terms of degrees of defects. An analysis of what the defects are and the degree of severity of the defects are done to determine the useful life of the asset. Once the useful life is calculated, the system determines the costs of alternatives to repairs and the owner of asset makes a maintenance decision on what to do with the asset.).

Watson fails to explicitly teach asset management of a building group. However, Watson discloses a asset management system that can be applied to a variety of industries, regardless of the intended field of use of the method. Watson teaches a asset management system, though the system has utility in other applications (see column 5 lines 58-64). The system being adapted to building maintenance management system is irrelevant since the intended use does not change the overall

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functionality of the system. The intended use must result in a manipulative difference as compared to the prior art. The intended use must result in a manipulative difference as compared to the prior art. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). Furthermore, the advantage of applying the Watson asset management system to the management of a building group is that the Watson system allows a user to determine costs and savings for maintenance functions for assets such as roofs, HVAC systems and other equipment that can be found in buildings. Therefore, it would have been obvious, at the time of the invention, to one of ordinary skill in the art to use the Watson system for facilities management because Watson system is designed to be used in an asset maintenance and management regardless of the intended use, which is contemplated by Watson (column 27 lines 1-10). Additionally, it would have been obvious, at the time of the invention, for one of ordinary skill in the art to use the Watson asset management system to a the asset management of a building group in order to determine the costs and savings of assets which are typically found in buildings.

As per claim 12, Watson teaches:

A building group management service support method according to claim 11, wherein in said next repairs, a same construction method and same materials are set to be used for repairs of said plurality of buildings and a repair time after said successive repairs is planned to generate in a same cycle (see column 7 lines 45-59, column 9 lines 5-24, column 9 line 42-60, and column 25 lines 19-41; where inspections are done to determine the condition of assets. The condition of the

assets are evaluated in terms of degrees of defects. An analysis of what the defects are and the degree of severity of the defects are done to determine the useful life of the asset. Once the useful life is calculated, the system determines the costs of alternatives to repairs and the owner of asset makes a maintenance decision on what to do with the asset. The inspection of the assets is done regularly and regular schedule of repairs is scheduled.).

As per claim 13, Watson teaches:

A building group management service support system according to claim 11, wherein said system is a computer system and when said repair time, said repair cost, said life of repairs, and said building evaluated value of said plurality of buildings are input by an input device, said repair time for each building is synchronized and a value changed to a most suitable repair time is output from an output device (see column 7 lines 45-59, column 9 lines 5-24, column 9 line 42-60, and column 25 lines 19-41; where inspections are done to determine the condition of assets. The condition of the assets are evaluated in terms of degrees of defects. An analysis of what the defects are and the degree of severity of the defects are done to determine the useful life of the asset. Once the useful life is calculated, the system determines the costs of alternatives to repairs and the owner of asset makes a maintenance decision on what to do with the asset. All of the data is controlled and stored by a computer system. Data inputs can be done via handheld devices used by maintenance personnel.).

#### Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are pertinent to the current invention, though not relied upon:

Cornett et al. (U.S. Patent No. 5216612) teaches an intelligent computer integrated maintenance system and method includes an electronically stored parts manual which contains a hierarchical listing of all parts in production machines, and a maintenance operations computer controller which includes a maintenance schedule management subsystem, an engineering change control subsystem, a parts manual management subsystem and a spares inventory management subsystem.

Vines et al. (U.S. Patent No. 6006171) teaches a computerized maintenance management system for the process control environment which integrates a CMMS system with a process control system.

Piety et al. (U.S. Patent No. 6192325) teaches a computerized method and apparatus which enables a user, even one who has little or no predictive maintenance skills, to establish a predictive maintenance database that defines information needed to monitor equipment in accordance with a predictive maintenance plan.

Honma et al. (U.S Patent No. 5343387) teaches a cyclical maintenance schedule.

Kalantar et al. (U.S. Patent No. 6954737) teaches a system and method are shown for work management for facility maintenance. The system includes a central management server configured to receive a first set of information including tasks to be performed at a first facility and to generate a first work schedule for a first user selected to perform the first work schedule at the first facility.

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Usher et al. (Usher, John S.; Kamal, Ahmed H.; Syed, Wasim Hashmi; "Cost Optimal Preventive Maintenance and Replacement Scheduling", *IEE Transactions*, December 1998, pp. 1121-1128) teaches a method for predicting a cost-optimal preventive maintenance policy.

Gopalakrishnan et al. (Gopalakrishnan, Mohan; Ahire, Sanjay L.; Miller, David M.; "Maximizing the Effectiveness of a Preventive Maintenance System: An Adaptive Modeling Approach", *Management Science*, June 1997, pp. 827-840) teaches an adaptive preventive maintenance management schedule which maximizes savings subject to workforce constraints.

Eade (Eade, Robert; "Software Makes CMMs Versatile, Flexible"; *Quality*, May 1995, pp. 20-26) teaches the development of software to manage maintenance systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571) 272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Kily Myn kkd

TARIO R. HAFIZ

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